

SERVICES, ORGANIZATION AND EDUCATION

YOUTH HEALTH CARE IN EUROPE OF THE 21TH CENTURY: AN ADDED VALUE FOR THE HEALTH OF CHILDREN AND YOUNGSTERS

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It is the main objective of Youth Health Care to promote, protect and evaluate the health, growth and development of children and youngsters.

The strengths of Youth Health Care are the periodic health checks of children, the very high coverage, the longitudinal care, delivered within a multidisciplinary context, free of charge, independent and easy accessible.

By means of this actively offered programme Youth Health Care contributes to the reduction of social-economic inequalities in the health of children.

To achieve these goals it is of great importance that the Youth Health Care programmes are evidence based. This is already the case for a number of the actual Youth Health Care programmes, of which vaccinations and the screening for phenylketonuria, congenital hypothyreoidie, hip dysplasia, congenital cardiac problems, neonatal hearing problems, are well-known examples.

Already based on these programmes alone Youth Health Care can be considered as cost-effective.

In order to preserve a well-established Youth Health Care in the future, we all should take care of the existing programmes, and try to increase their efficiency.

In addition, to maintain the high coverage of the target group of children and adolescents which is actually reached in most of the European countries, Youth Health Care professionals should be open for questions of parents and children, and be as available as possible for their problems.

On a population level the health threats and societal developments, as far as regarding children, must be intensively monitored by Youth Health Care services. These data contribute to a clear picture of the health of the young population in a country, which should drive the local health policy.

An important health threat for the near future will be the increased prevalence of psychosocial problems during childhood in almost all the European countries. Last but not least, the prevention and early detection of overweight and obesity during childhood is without any doubt one of the top priorities for which effective preventive programmes should be designed. To face these problems we should combine all forces.

Keywords: youth health care, evidence-based, psychosocial health, obesity

UNIFORM DEFINITION OF THE ACTIVITIES OF THE YOUTH HEALTH CARE (YHC) IN THE NETHERLANDS (79)

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In the fall of 2003 the platform Youth Health Care was funded by the ministry of health for the development of uniform definitions for youth health care. The purpose of this project was to ensure that all YHC workers would use the same definitions for their activities and that they should register their activities in a uniform way. These definitions are necessary for the future development of an electronic medical file. The definitions are also needed for nationwide monitoring of specific diseases or behaviour. The development of the definitions has taken place in a typical Dutch way, the so called Polder model. The polder model means lengthy discussions that will only end when there is consensus about the discussed subject.

First the outline of the definitions was described. Generally these definitions consist of three parts. First the definition proper was described. For example: what is the definition of the nationality of a child? Is it the place where it is born, the passport it has or the place where the parents of the child are born or the passport they have or is it the nationality of only one parent and which parent or nationality is decisive?. Secondly the purpose of the activity was described. For example: why do we need to know the nationality? Thirdly: The registration in the medical file: Was the growth examined, was there some aberration? Was there an intervention, what kind of intervention? Was there a follow-up? The outline will be shown in the presentation.

Secondly seventy-one definitions are formulated, 18 by the platform itself, 37 by a group of professionals and 16 by TNO. The group of professionals had to apply for the job. Every professional got one or two subjects. All professionals had the digital support of wide group of professionals. The TNO professional had also support of a group of professionals.

Finally the concepts of the definitions were commented on by a panel of .experts. After their approval the concepts were handed over to the representatives of the societies of the workers in the YHC, the doctors, nurses, speech therapists and medical assistants and also to the organisations of the employers and to the ministry of health. In February 2005 general approval of the definitions had taken place. Nationwide training meetings have started. The aspect of the digital support has proven to be very effective for the general acceptance of the definitions.

Key words: definitions, activities, youth health care

HEALTH SERVICES AND PREVENTIVE INTERVENTIONS FOR ADOLESCENTS IN SCHOOL SETTINGS-AN INTERACTIVE WORKSHOP (131)

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OBJECTIVE OF THE WORKSHOP: To learn to know, exchange and discuss models of health care, health promotion and prevention for adolescents in schools from various countries.

CONTENT: While some of the classical tasks of health care and prevention in schools have to be maintained, school health services are challenged in addressing new morbidities of the adolescent age group, such as eating disorders and obesity, smoking and other drug use, stress and depression, accidents and violence and sexually transmitted infections.

How can health education be linked to the school curriculum? How can a healthy lifestyle be propagated not only at the individual behavioural level but also be influenced with the development of healthy environments? Examples from Zürich in addressing the above challenges will be provided and are intended to start a discussion on different models and experiences from the participants.

CAPACITY: 30 people, multidisciplinary. Suggested time frame 90 minutes.

Key words: adolescents, school health service, health promotion, new morbidity

HOW TO MAKE HEALTH CARE FOR SCHOOL CHILDREN AND YOUTH MORE EFFICIENT (262)

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Existing health care models for school children and youth can best be analyzed through two extreme models of this health care. The first model is characterized with integrated school children health care which is offered by a single doctor who conducts both curative and preventive health care measures for each child. The second model is characterized by a “rough” division of curative and preventive health care, so that one doctor (usually a family doctor or a paediatrician) cures a child, and another doctor does preventive health care. Inadequacy of the first model is impossibility of adequate intervention in school setting or peer group level. The second model has a consequence of uncoordinated procedures and interventions on individual level.

Analyzing the work of school health care services, one can remark reasons for their insufficiency: division of preventive and curative procedures has consequences of repeating procedures, limited possibilities of intervention in preventive health care, not coordination between doctors, uncoordinated individual and group procedures in health care.

The existing health care models do not give the answers to the leading health problems of youth, such as risk behaviour and habits (smoking, alcohol drinking, and using psychoactive drugs), mental health problems, sexually transmitted diseases, obesity, school problems and so on.

One should seriously consider possibility of organizing services for school and university medicine which will be closer to school and enable integrated form of youth health care, services which will be more prone to changes in regard to population demands and more ready to better communication with the youth. One of the possible solutions are counselling services within school medicine services which will enable the youth, individuals and groups to simultaneously resolve more problems at one place.

Key words: school health service, integrated health care, curative and preventive health care

HEALTH CARE SERVICES FOR YOUNG PEOPLE IN THE MACEDONIA (7)

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Particular attention in public health policies in the Macedonia is being given to promote the health of children and young people.

SUBJECT: The purpose of this paper is to present the organization of health care services and to recognize is there need for improvement and changes.

METHODS: Descriptive and statistical methods are used for analyzing the data.

RESULTS: Young people from 10 to 24 years are 24, 6% of total population. Health care can be delivered through primary, secondary and tertiary health services, with each level including certain prevention activities. There are outpatient services in health centers (30) which include special services for school children and youth, than services of GPs and polyclinics on the primary level. The secondary health care system comprises of specialist and consultative care and hospital care - general (16) and specialised for vulnerable groups or diseases (mental health, STIs). Tertiary health care is the highest level and is provided through specialised services offered by clinics and special institutes of Clinical Center -Skopje and rehabilitation facilities. Republic Institute for Health Protection and 10 regional institutes are responsible for planning, monitoring and evaluation of services. There are also services provided by private sector. All these services are on a static facility basis except patronage services on out reach or mobile basis. But, providers are also from sector for education, labour and social policy, NGO and many international organizations (UNICEF, WHO, USAID, UNDP...).

DISCUSSION: Problems come from changes in health behaviour of young people (smoking, unsafe sex, abuse of drugs and alcohol, unhealthy diet, violence), than social problems (trafficking, economic and sexual exploitation) and low level of cooperation among partners in delivering health care services.

CONCLUSION: There is urgent need to take steps to improve this situation. Information on health issues needs to be widely available and accessible for young people. Services must be specifically geared towards their needs. The Ministry of Health started with new approach: Youth Friendly Services because they are important resource for the future-they are not the sources of problems.

Key words: health care services, health organisations

EDUCATION OF EDUCATORS (206)

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Sheer expertise and know-how are not sufficient if one is to be a successful educator. Emotional maturity of a teacher is the imperative of any efficient work with schoolchildren. Psychodynamic psychotherapy has a long-lasting experience in the education of psychotherapists, always led by the premise: It's the therapist who cures, not the method. A similar slogan may be applied to pedagogy: It's not the pedagogy, it's the pedagogue who influences children.

For more than 15 years, the authors have been leading educative groups, working with primary and secondary school teachers, each educative group comprising 8-20 members. These groups are closed, and as the work with them lasts for 3 years, the number of members may in time decline. The groups meet once a week, for two school periods. At the beginning of the work (for some 15 minutes), the leader informs the members on some topics related to schoolchildren psychopathology. After that, the members of the group talk about their own problems related to their relationship with pupils. In this respect these groups, at least at the beginning, resemble Balint's groups. In time, after a year, when the group becomes homogeneous, the members open themselves and start sharing their own personal problems and the group thus becomes a psychotherapeutic group. After three years, due to this type of group work, the teachers' emotional experiences become an important instrument not only in their relationship towards pupils and their parents, but to their colleagues as well. Joining the group is the result of teachers' personal motivation, and there are members who keep coming to group supervision for another year. At the end of the work the participants are given certificates.

We would like to say that in the treatment of school failure there are 6-month educative groups for parents. There are also 1-year educative groups for kindergarten teachers. Our experience shows that the given period is long enough for the group members to experience an efficient emotional change. Group members have access to the books we have written: Psychotherapeutic pedagogy, Child, school, family and Education of educators.

Key words: education of educators, emotional experience, group

USE OF eHEALTH SERVICES AMONG FINNISH UNIVERSITY STUDENTS (21)

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INTRODUCTION AND SUBJECTS: Among Finnish people in working age young adults are most active users of email and Internet. University students use these electronic net services even more actively than the whole young adult population. Internet has also shown to be an important source of health information. Our study was made, as a part of national student health study to estimate students' use of and their attitudes to eHealth services (Definition by EU: Application of information and communications technologies (ITC) across the whole range of functions which one way or another, affect the health of citizens and patients) as part of student health care.

METHODS: This study was made as a part of "Student Health Survey 2004", a national survey among Finnish undergraduate students aged 19-35 years. The population size was 5030 and the response rate 62, 7 % (N=3153).

RESULTS: The main part of respondents had a positive attitude to eHealth services; about 80 % of them they were willing to substitute some of traditional forms of health services by eHealth. Electronic scheduling or cancelling appointments were the most eHealth services in demand. Half of respondents wished to get the results of laboratory tests or their prescriptions renewed by using eHealth services. Half of students had used FSHS's websites, 16 % had communicated with doctor, nurse or psychologist by email, and 12% had used health counselling service in Internet. Most active students to use eHealth services were found in the capital city region.

DISCUSSION AND CONCLUSIONS: Even if university students do not represent the whole population, they can act as "pilot population" representing adults of working age of a future information society. The students are active user of ITC and therefore require also adequate eHealth services.

Key words: eHealth, university student

SCIENTIFIC CHALLENGES FOR SCHOOL HEALTH AT THE BEGINNING OF THE THIRD MILLENNIUM (239)

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School medicine is considered to be a young scientific discipline. However we can trace the first signs of the emerging discipline as early as mid nineteenth century in different parts of Europe. In Croatia, the first school doctors were nominated in the last decade of the nineteenth century.

In the presentation a short historical survey of the development of this very active field is given.. Special attention is devoted to the changes of the focus of interest in this field due to the changing environmental and social conditions in which the young people were growing during the last century.

Even the age limits of the population included in the regular school system drastically changed: from the compulsory education embracing the ages from 7 to 15 in the mid XX century to the present span of school years starting from the age of six continuing up to nineteen.

Such a situation lends itself to a wide range of challenges for joint efforts of the school medical staff, teachers, social workers and psychologists to improve different aspects of life and work of this age group, including their active participation.

Key words: school medicine, school doctors

A SURVEY ON SOURCES OF INFORMATION ON MENTAL DISEASES WITH 1ST AND 4TH GRADE STUDENTS IN LJUBLJANA (96)

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A survey on sources of information on mental diseases with 1st and 4th grade students in Ljubljana. At our Department for Student Health of the University of Ljubljana, Slovenia, systematic check-ups are performed for all students in the first and fourth year of study.

The routine questionnaire contains some questions on family anamnesis. One of them is a question about mental diseases. When students reporting on such anamnesis are asked in detail about it, they frequently show lack of knowledge, despair, sadness, or even burst into tears. Afterwards, they often discuss their feelings and difficulties in relation to the problem for the first time in their life.

Hence, we decided to introduce an additional questionnaire to all students who have positive family anamnesis of mental diseases. The questionnaire contains questions on the students' knowledge about their relatives' disease, the sources of information on the disease that they had, as well as on their attitudes towards getting more information on the issue. The results will be statistically analyzed and graphically presented.

In Slovenia, an initiative is currently under way to move from GPs for adults to family doctors. Perhaps our survey could use this opportunity to improve the present practice, since better knowledge about family members' mental diseases can make the life of everyone involved at least a little easier.

Key words: mental disease, knowledge, family members

IMPROVE YOUR HEALTH INTERVENTION: THREE QUESTIONNAIRES TO DETECT CHILDREN WITH PSYCHOSOCIAL PROBLEMS COMPARED (176)

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INTRODUCTION: The Dutch Preventive Child Healthcare Services have an important task where detection of psychosocial problems is concerned. Valid and concise questionnaires can improve the detection of these problems. In the age group of 7-12 year olds such questionnaires lacked in the Netherlands.

Three questionnaires were assessed in terms of suitability for Dutch Preventive Child Healthcare Services: Strength and Difficulties Questionnaire (SDQ), Paediatric Symptom Checklist (PSC) and a newly developed questionnaire, the PSYBOBA.

METHODS: 750 parents with a child aged 7-12 years received a questionnaire with the Child Behaviour Checklist (CBCL) and either the PSC, the SDQ or the Psyboba. During a routine preventive health check, Preventive Child Healthcare Services recorded more data on psychosocial problems. Scale structure of the questionnaires was evaluated. Sensitivity and specificity were calculated using the CBCL total problem score as criterion. Added value of questionnaires for Preventive Child Healthcare Services was evaluated.

RESULTS: Structural equation modelling showed a poor fit of the scales of the three questionnaires. Cronbach's alphas were high. Sensitivity and or specificity were poor for all three questionnaires. Better cut-offs could be obtained resulting in a specificity of about 0.90 and a sensitivity of at least 0.78. PSC showed the poorest values. Added value of all three questionnaires was substantial, although PSC performed somewhat poorer than SDQ and PSYBOBA detecting a clinical CBCL score.

CONCLUSIONS: Dutch Preventive Child Healthcare Services are strongly recommended to implement the PSYBOBA or the SDQ with adapted cut-offs in their preventive health checks as the PSC performs somewhat poorer in the detection of psychosocial problems. This would improve the health interventions regarding the detection of psychosocial problems in children. This in turn might contribute also to the efficiency of referrals from Preventive Child Healthcare Services to Mental Health Services.

Key words: detection of psychosocial problems, questionnaires

HOW SCHOOL HEALTH SERVICES MEET THE CHILDREN AND ADOLESCENTS' NEEDS – CASE STUDY CROATIA (243)

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The health of the children and youth is the investment in the country development. The burden of their ill health and impaired development may have enormous consequences and direct or indirect effects. Efforts to meet children and adolescents' needs reflect through the sustained action to improve the health and to reduce the inequalities.

The organization of health care and the national program for school children and youth in Croatia is described. The advantages and disadvantages of that organization are discussed.

In Croatia, preventive health care measures for the school children, youth and university students are provided by the school health services, while for the child or young person while being ill, general practitioner takes care. School health services are organized in the public health institutes, school medical specialists and nurses responsible for the program implementation. Each service unit (a medical doctor and a nurse) takes care for 5000 school children, youth and university students. The annual program is developed at the national level and embraces regular checking of the health status through systematic examinations, check-ups and screenings, than vaccination, health education and health promotion, counseling (guidance services), including care for chronically ill children and children with the special needs. In addition, school doctors are often involved in the multidisciplinary projects at the national or local level. There are more than 160.000 counseling annually and for all primary school students and for the one third of the secondary school students health education has been delivered.

The most important emerging threats during childhood and adolescence are obesity, psychosocial and mental health problems, injuries and reproductive health. The separate service for children and youth has definite advantages as permits preventive and specific approach to this population, but the possibilities for the intervention are felt to be too limited.

Key words: school health services, school medical specialists

BEST PRACTISES OF CO-OPERATION OF HEALTH CARE ORGANISATIONS AND UNIVERSITIES IN FINLAND (198)

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Different student organizations' co-operation with health care organisations and universities is in good level in Finland. However connection between the health care organisation and universities should be improved.

MAIN GOALS:

To develop studies and study environment to support more welfare of students

To get University staff and personnel in health care recognise health risks involved in school and university environment

SUBJECT: Main problem is that distance between health care organisation and university hampers health care staff's ability to recognise factors in study environment that could harm student's physical and mental health.

METHODS: (we'll give one example of each topic)

Co-operation with student organisation

Student organisation's participation in governance and planning of health care system strengthens the link between students and health care system. As students are able to influence the practises of their everyday health care, they feel the system much more as their own.

Attending to activities

As student health care staff attends to different kind of student activities, for example sporting events, the health care personifies and gets closer to student.

Increasing the knowledge of study system of health care staff

Continuous information on the changes in study systems to health care staff is necessary for their ability to understand the student welfare as a whole.

RESULTS: Current results in co-operation are promising. The presentation also centralises in future hopes.

Key words: student healthcare, university healthcare, co-operation

**SPECIAL PUBLIC SERVICE PROVIDED BY THE PUBLIC HEALTH DEPARTMENT
OF FRANKFURT/M FOR RISK FAMILIES WITH PRESCHOOL CHILDREN
PRESENTING BEHAVIOURAL AND/OR DEVELOPMENTAL DISORDERS (50)**

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OBJECTIVE: Since 2002 we offer our public consultation service to families with school beginners, who show behavioural and/or developmental problems (e.g. inattentiveness, impulsivity, hyperactivity) in our examination. Those families also have supplementary psychosocial risk factors (e.g. migration, lower social class, single parent). They seldom find their way to the established institutions like out-patient departments of paediatricians, psychiatrists for child and adolescent or social youth services.

Therefore we set up a supplementary consultation service offering low-threshold and quickly obtainable appointments. Our aim is to diagnose and to introduce therapy before school starts. We present aims, structure and methods of our special diagnostic service.

METHODS: In preparation to our public consultation service parents and kindergarten teachers were requested to fill in a standard evaluated questionnaire about the behaviour of the child in the kindergarten and at home (Optimind® checklist, VBV 3-6 ER Döpfner et al.1993). Then each child is carefully examined by a paediatrician in cooperation with a psychologist or psychiatrist for child and adolescent (medical history, milestones of the development, neuro-paediatric examination, Kaufman- Assessment battery for children). A debriefing session follows to discuss the necessary treatment and /or special social help instruments.

RESULTS: Case descriptions of all children including diagnoses, therapeutic and psychosocial recommendations and parental interviews will be presented.

Our results until now show: sex ratio boys/girls is 5:1; 85% of the families have psychosocial problems; 40% are diagnosed with ADHD (Attention deficit hyperactivity disorder); 60% have a combination of psycho-mental retardation and severe family disorders without any educational support.

CONCLUSION: The assessment of our cooperative special service shows that there is a need for such a supplementary public health service. Families with a socially risky background receive early support by ways of parental counselling, therapy and social support.

Key words: public special service, preschool children, behavioural and/or developmental disorders

SPECIAL COMPETENCE IN CHILD AND SCHOOL HEALTH CARE (76)

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Finnish Medical Association has recently (1993) introduced a new system of special competences, supplementary to the official system of specialization. Special competences can relate to specific areas of specialization. Special competences can relate to specific areas of specialities in which particular skills of demanding natures are required. Suggestion for the establishment of new areas of special competence usually stem from the specialist association in question.

Special competence in Child and School Health Care was established in 2002.

Six associations take part to establish this special competence. These were Finnish Association of School and Adolescent Medicine, General Practitioners in Finland, Finnish Association of Paediatricians, Association of Paediatric Neurology and Finnish Association for General Practice.

In Finland we have the system called small area population responsibility. Family doctors together with public health nurses of health centres take care of the health services of the whole area.

The problems of children and youth have become more complicated. The doctor who is working in the children health care centre and in school health care needs special skills. Special competence in child and school health care can respond to these requirements.

A doctor who wants to get this special competence must be specialist in general practice or in paediatrics, or in paediatric neurology or in paediatric psychiatry. In addition he or she has to work at least two years in health care centre as a school doctor and also in children health care centre. In special clinics he or she has to work six months. He or she needs 80 hours theoretical education. After the education there is a national examination.

Committee members of these five associations handle the applications. The committee makes its suggestions to Finnish Medical Association for approval. At the moment 37 doctors have special competence in Child and School Health Care.

Key words: school health, adolescent, special competence

SCHOOL HEALTH IN LITHUANIA: CHALLENGES AND FUTURE AGENDA (107)

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The Lithuanian National Public Health Care Strategy, approved by the Republic of Lithuania Government in 2001, establishes the main guidelines for the public health care reform directed to greater attention to disease prevention, health promotion, reduction of health risk factors. One of the parts was given to the needs of the most sensitive part of the community– children. According this document school health care system has been reorganised. Earlier, trained nurses looked after children's health in schools and the main task was primary health care. The new in 2003 adopted Republic of Lithuania Law on Education provides for employment of public health specialists with higher education in school who should help young people not only retain good health but also improve it. A young man shall be assisted in comprehending that his or her lifestyle bears the greatest influence over health, while the task and duty of public institutions is to give help to a child through creation of conditions for realisation of his or her positive choice.

Objective of this study is to review Lithuanian school- based health care legislation, to evaluate existing situation and foresee future agenda.

METHODS: The existing Lithuanian school-based health care legislation were reviewed and data from municipalities were analyzed.

RESULTS: Municipalities in Lithuania are responsible for school health. Budget has two sources: national and local. There are 60 municipalities in Lithuania, and experience and situation in every of them is different. Every year financing of school health is rising, more specialists with higher education have begun to work in schools. Competency of specialists according special training courses, organised by the Minister of Health, is advanced.

CONCLUSION: The development of national School health program, as one of future strategies, in which is necessary to clarify responsibilities of national and local authorities, foresee supporting financing mechanism of municipalities, future qualification of specialists, sharing a good practice between municipalities, health teaching of local politicians and decision makers.

Key words: school health, children's health, public health specialists

THE CHARACTERISTICS OF AMBULANCE CALLS DUE TO ACCIDENTS IN 0-24 YEARS OLD POPULATION OF BUDAPEST, HUNGARY, 1998-2004 (116)

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SUBJECTS: We studied the characteristics of accidents in childhood and young people in Budapest on the basis of the ambulance calls in 1998-2004 for the age groups of 0-4, 5-9, 10-14, 15-19, 20-24 years. Daily emergency ambulance calls with the following diagnoses were studied: fractures, distortion, commotion, contusion, open lesions.

METHODS: In the evaluation descriptive and comparative statistical methods and trend analysis were applied.

RESULTS: During the studied period there were 474507 emergency calls registered, out of them 66905 calls concerned children under 25 years. There was a significant increasing tendency in the number of calls in case of 0-4 and 5-9 years old children. 54.9% of all emergency calls were due to accidents in the children population. The rate of torsions was the lowest, (3.9%) and the rate of open lesions was the highest (17.8%). In the age groups of 0-4 years and 5-9 years the most frequent reasons were commotion and contusion. From the age group of 10-14 years on fractures were the most common causes. Calls due to open lesions showed an increasing tendency, while those due to contusions decreased. Number of calls due to other types did not show significant changes. Calls due to open lesions were most frequent during May-June, contusion in June-August, fractures as well as torsions showed two peaks in May and in September-October. Cases of commotion showed less seasonal variation. There was also a weekly variation in the types of accidents: fractures happened mostly on Wednesday-Friday, contusions on Friday, Saturday, open lesions were least frequent on Sunday and they started to increase during the week. A diurnal variation was also observable: torsions were most frequent between 10-12 hours fractures 11-18, contusions: 14-19, open lesions between 16-18 hours. Calls due to commotion were evenly distributed between 8-20 hours.

CONCLUSION: The analysis reflects the risks of different age groups, accidents are connected to different activities at home, at school and in afternoon leisure time. The study can effectively be used in planning prevention programs.

Key words: childhood accident, trend analysis, ambulance call

AN ACCOUNT OF SCHOOL HEALTH-FAMILY MEDICINE COOPERATION IN CROATIA (144)

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Presented is an overview of the actual status of school health in Croatia.

INTRODUCTION: An integrated health service for school children and adolescents, as available in this country up to 1998, was offering a nearly comprehensive health protection, performed by a single physician, the school health doctor. Then a bill has split these activities in two, dividing them between the school health specialist (>preventive aspects) and the selected family doctor (>curative aspects).

AIM: To discuss critically the merits and (particularly) the demerits of this swift change from the standpoint of a school health specialist actually working as a family physician.

DISCUSSION: A well-functioning, disintegrated school health service in some countries should not have been hastily, in a revolutionary way, translated into a small transitional country with well developed and well operating integrated system, without due analysis of the status quo, of the available socioeconomic resources, and of the possible consequences. Indeed, at that time the vaccination rate was exemplary, the systematic check-ups were performed according to declared programs, and the curative activities were adequate; only the health education activities and contacts with the educational institutions were not elaborated enough. According to the prevalent opinion, these shortcomings could be resolved decreasing the pupils' quantitative standards (health norms), leaving enough time and space for the mentioned goals.

CONCLUSION: Instead of concluding remarks, here are some pertinent questions:

What is the actual role of school physician between two vaccinations or check-ups?

Are the school doctors duly informed about the current epidemiological situation in a particular school setting?

Is the family doctor the only person in charge of (solving) family problems? If not, what kind of cooperation with a number of school health professionals is conceived?

Within a legion of selected doctors, who is entitled to accept/overrule the health notes of excuse, sick leaves and other forms of school absenteeism?

What parents and pupils may expect from a school health specialist in their own class/school?

Besides the free choice of family physicians why there is no an analogous free choice of school physicians?

Key words: school health specialist, family physician

PRIMARY HEALTH CARE FOR SCHOOL CHILDREN IN BELGRADE (167)

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INTRODUCTION: Primary health care for school children in Belgrade is provided in 16 Health Centres. Children age 7-19 years are covered also with 20% of health education.

SUBJECT: Rising up awareness of health importance and establishing long healthy life habits and school children total health status and set of measures for improving their health.

METHOD: It is social medicine retrospective evaluation study based on routine statistical reports in Institute of Public Health in Belgrade. Materials are all school children in Belgrade elementary and high schools (210 979).

RESULTS: School children have adopted healthy life concepts for improving health. Professionals were educated to continue their educational role. Mobilisation of communities by rising up their awareness of healthy life styles.

DISCUSSION: Program of health education through primary health care is still conducting in Belgrade. Innovation in partnership for health is open. **Conclusion:** Level of awareness of health is risen up among scholars in Belgrade.

Key words: primary health care, school children, life style

LACK OF COMMUNICATION BETWEEN SCHOOL DOCTOR AND GENERAL PRACTITIONER PRESENTED BY ANALYSIS OF RECORDED DIAGNOSIS (218)

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INTRODUCTION: Since 1998 integrated health care of school children has been divided into preventive care provided by school doctors and curative care in domain of general practitioners (GP).

The aim of this study is to present how medical charts of school doctor and GP vary for the same population of children.

SUBJECTS AND METHODS: Descriptive survey was conducted by 2 GP-s who compared own diagnosis with school doctor's charts for their current school aged (7-18 years) patients. Randomised sampling by choosing every 5th chart among 800 children in Đakovo and 3rd chart among 300 children in Samobor formed sample of 260 children. According to predefined questionnaire information about school success, socio-economic status and diagnosis of scoliotic posture, ophthalmologic disorders nocturnal enuresis, epilepsy, learning disorders, cardiac malformation, anaemia and "other chronic diseases" were recorded.

RESULTS: Similar results were gathered on both locations. GP-s are informed just as school doctors about lower level of school success of students, but for 24% haven't got any information. Diagnosis of specific learning disorders varies. Of 15 children that have adjusted or specific curriculum, GP-s have evidence for 5. Both doctors are well informed on marital status of parents. For 64% of patients in Samobor school doctor has no information on socio-economic status. Largest difference is in recorded nocturnal enuresis – 6% in school doctor's chart and none in GPs. Anaemia is diagnosed in 8% of patients in GP's compared to none in school doctor's office.

Ophthalmologic disorders and scoliotic posture are more diagnosed by school doctors, but allergies and "other chronic diseases" are more recorded by GP-s.

DISCUSSION: School doctors are better informed on school success and curriculum of patients, as well as disorders detected through systematic check up's and screening as scoliotic posture and ophthalmologic disorders. GP-s have better knowledge about socio-economic status and chronic diseases. Results are expected regarding field of work of GP and school doctor, but also present how medical charts can vary for the same population. In order to provide best health care for children certain level of communication between doctors is required.

This pilot-survey shows lack of communication between school doctor and general practitioner but small sample demands wider survey before final evaluation.

Key words: general practitioner, school doctor, communication

ADVANTAGES AND SHORTCOMINGS OF THE NEW SCHOOL MEDICINE STRUCTURE (238)

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BACKGROUND: In Croatia, the development of school medicine as a separate specialty began in the second half of the 19th century, abreast with Europe. Integrated health care has been traditionally developed. Upon launching health care reform, however, integrated health care at the school level was in contrast with the patient right of free choice of primary care provider. Therefore, since 1998 school medicine as a preventive and specific specialty has been organized at public health institutes.

AIM: Experience based analysis and assessment of the present structure.

SUBJECTS AND METHODS: Anonymous questionnaire was distributed to 119 specialists in school medicine providing therapeutic service, 119 educationists with experience in integrated care until 1998, and 125 specialists in school medicine engaged in preventive activities and experienced in integrated care.

RESULTS: The questionnaire was filled-out by 39 (32.77%) specialists engaged in therapeutic activities and 37 (29.60%) specialists engaged in preventive activities. The physicians working on preventive activities could only partially monitor school children's health state (76.92%) due to a too large catchment population (71.79%), too extensive program of activities (53.85%), unsatisfactory collaboration with the primary care physician (61.54%), and lack of computer equipment (48.72%). Data on freely chosen primary care physicians were available to only 38.46% of preventive physicians; therefore, only 66.67% of the physicians engaged in preventive activities occasionally informed the primary care physicians on health problems recorded in school children on preventive examinations, whereas 15.38% did not do it at all. In addition to the above mentioned reasons, 5% of preventive physicians reported on scattered field work and poor collaboration with parents. Given the existing standards and extent of work, 51.28% of preventive physicians depicted health education as the most deficient field, followed by counseling (20.51%). Specialists engaged in therapeutic activities established cooperation with preventive specialists primarily for vaccination contraindications (64.86%), chronic diseases (54.05%), mental health and learning (48.65%), and gym classes (40.54%). After preventive examinations, 67.58% of these physicians received no further information on their patients, and 98.89% of them believed the present structure could not provide efficient health care to school children and students. The majority of educationists (93.28%) evaluated the current collaboration with school medicine teams as satisfactory, 52.94% considered the integrated care concept more successful for making cooperation with one school physician easier and providing a thorough insight into the school children's health state (32.77%).

CONCLUSION: The current structure of this health care segment, separating preventive and therapeutic activities to different institutions (health care institutes and health centers, respectively) does not allow for integrated follow-up and surveillance of school children and epidemiologic situation at school due to a too large catchment population, inadequate computerization of primary health care, and unsatisfactory collaboration with primary care practitioners, thus hampering continuous intervention programs and solving of major public health issues in this population group.

Key words: school children, students, health care, school medicine

HEALTH CARE SURVEILLANCE FOR ADOLESCENT IN SLOVENIJA (242)

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The schedule of health care for adolescent widely differ in European countries. Slovenia is a small country of 2 million people and having 270.000 children attending school from age 6 to 19 years. The Slovenian school doctors find a great advantage of having: 30% of our work time preventive health care (systematic examinations, check-ups, screening, vaccinations and health education and promotion programs and 70 % of our work time is curing - outpatient treatment. Most of medical school doctors work on the primary health care level in Health Community Centers (HCC). HCC are outpatient clinics where medical doctors of different cross-section work. The biggest HCC is in Ljubljana with 6 independent units. I describe one of the units where I work as a school doctor. In this unit we are 4 medical school doctors and we take care of 7 primary schools, two secondary schools and 3 grammar schools (7800 pupils) and we have 7500 adolescent for outpatient treatment. These types of medical services for adolescent have existed in Slovenia for more than 60 years. The »double« medical care gives us high percentage of immunization and well communication with adolescent.

Key word: school doctors, primary preventive care, health education

TEACHING TEENS - INFLUENCE OF HEALTH EDUCATORS ON THE KNOWLEDGE LEVEL AMONG YOUNG PEOPLE – GERMAN SUCCESS STORY (251)

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Sponsored by Johnson & Johnson

INTRODUCTION: Group of health educators from Germany - Die Ärztliche Gesellschaft zur Gesundheitsförderung der Frau e.V. (ÄGGF) is organization of female gynecologists with primary focus on prevention and education of school children, in order to help them to understand and anticipate the inner and outer influences of this turbulent lifetime.

The Robert Koch - Institut in Berlin evaluated the work of this organization in 2002. The knowledge increase among young girls after having attended a lesson given by a trained health educator was significant – proving how much influence health educators have on the young people.

METHODOLOGY: Organization of health educators was conducting lectures all around Germany, with more than 50 000 young people attending the lectures. Topics of the lectures were various: growing up and puberty, physical changes in puberty, menstruation and menstrual hygiene, sexually transmitted diseases and protection from sexually transmitted diseases, pregnancy and contraception, and further.

Lectures were conducted by 80 doctors in several different schools. There was a standard test given to a group of girls before the lesson and 2 weeks after the lesson, in order to evaluate influence of lectures on the knowledge level among young girls.

There were 2 groups of respondents: girls of primary school age, 6th grade – average age of 11,7 (further in the text Group 1) and Group 2: 9th and 10th grade (equivalent to our 1st and 2nd grade of secondary school), with average age of 15,0 and consisted of both, boys and girls.

RESULTS: Test results before the lesson, for both groups together, showed 39% of correct answers. Test conducted 2 weeks after the lesson showed knowledge increase of 32% among Group 2, and knowledge increase of high 82% in the Group 1.

Moreover, before the lesson, only 6% of the students believed that they could learn „a lot“ or „very much“ on the lesson itself. After the lesson, however, 95% of the girls in the Group 1 and 82% in the Group 2 marked the lesson they attended with „Good“ or „Very good“.

DISCUSSION AND CONCLUSION: Health educators have significant influence on young people: their lessons are not only well accepted and liked among young students, but also build long lasting knowledge and represent a base for healthy development in the future.

Programs similar to this are done in cooperation with Johnson&Johnson Company in many other countries in the world and Europe, with health educators and/or school teachers (Australia, Austria, France...).

This program, with its remarkable results has potential to be incorporated within health education programs in many European countries. Professionals of different profiles could be included in providing this preventive program like school doctors, gynecologists, teachers etc.

Educational materials (macromedia flash animations, 3D models, brochures) need to be modified according to each cultural demands and needs.

Key words: health educations, puberty, STI, teenagers